



**ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
DECEMBER 3, 1998, 9:00 A.M.
EXECUTIVE CONFERENCE ROOM**

Present: C. T. Maki G. D. Taylor J. D. Culp
C. Roberts P. F. Miller T. Myers (J. D. O'Doherty)
T. E. Davies J. W. Reincke T. Fort
M. H. Frankhouse S. Bower

Guest: C. Bleech J. T. LaVoy

OLD BUSINESS

1. Approval of the Minutes of the November 5, 1998, Meeting - G. D. Taylor

Minutes of the November 5, 1998, meeting were approved as written.

2. Bituminous Advisory Committee's Recommendations on the Pavement Sealants Corporation's Presentation on a Life Cycle Cost Analysis of Styrene Butadiene Rubber Latex Modified Asphalt Cement - G. Mayes

The December 3, 1998, memo (attached) from the Bituminous Advisory Committee (BAC) to the EOC summarizes the department's position on the use of polymer modifiers. The department will continue to use the SUPERPAVE program and its specifications, which allow the binder supplier to select modifiers that best fit their operation and product's performance.

ACTION: EOC accepted the BAC's conclusions.

3. SUPERPAVE Bituminous Mixture Usage on 1999 Projects

EOC originally approved an implementation plan that required 40-50 percent SUPERPAVE usage in 1998 and full implementation in 1999. Full implementation is approximately 85 percent of all tonnage in the 1999 program. The Bituminous Mixture Selection guidelines reflecting the implementation plan were issued by Steve Bower on April 6, 1998. Curtis Bleech surveyed the regions and found that approximately 66 percent of the 1999 program is specifying SUPERPAVE mixes.

ACTION: Mike Frankhouse will evaluate the progress of SUPERPAVE implementation and the compatibility of the bituminous materials selected for individual projects in the 1999 program. This evaluation is to include

recommendations/changes at the project level in order to prevent problems experienced in 1998.

Steve Bower will talk with the project development engineers about adding the "mixture type" to project scoping documents. Adding the SUPERPAVE mixture type to the scoping document is intended to ensure that the appropriate mixture type is specified by the designer. Projects for year 2000 and beyond will require an exception from the Bituminous Advisory Committee if non-SUPERPAVE mixtures are proposed. Exceptions should be sent to Mike Frankhouse for BAC review.

Steve will re-issue the Bituminous Mixture Guidelines to designers for designing the 2000 program. Curtis will review the 1999 high volume projects for SUPERPAVE compliance and initiate changes as necessary.

NEW BUSINESS

1. **Paying Stockpile Aggregates for Bituminous Mixtures - M. Frankhouse**

The bituminous industry requests consideration be given to payment for stockpiled aggregates used in bituminous paving projects. The proposal is feasible for large projects and some pilot projects in 1999 were recommended by the BAC. Some of the benefits to be gained are expediting the mix design approval process, potential cost savings (on the interest saved), and avoidance of aggregate shortages that would ensure timely completion of projects.

ACTION: The issue was discussed at length, but no consensus was reached. Item is tabled until the January 7, 1999, meeting.

Mike Frankhouse will review the department's issues and concerns with the industry (MAPA and MAA).

Thom Davies will survey the regions to gain their insight and viewpoint on the proposal.

2. **Approval of Logo Signing Evaluation - J. D. O'Doherty/M. W. Bott**

The research and evaluation was conducted by Michigan State University. Their final report is submitted for approval and is due to the legislature by December 31, 1998. The report conveys information on the impact of the Logo Signing Program on the outdoor advertising industry and the economic feasibility of the program.

ACTION: For this type of evaluation, it is not the department's role to make recommendations. The recommendations section of the report is to be removed and the report is approved for transmittal to the state legislature.

(Signed Copy on File at C&T/Secondary)
Jon W. Reincke, Secretary
Engineering Operations Committee

JWR:kat

Attachment

cc: EOC Members
Region Engineers

J. R. DeSana	R. J. Risser, Jr. (MCPA)	G. L. Mitchell	B. Richter
R. J. Lippert, Jr.	A. C. Milo (MRBA)	J. Ruszkowski	R. D. Till
D. L. Smiley	J. Becsey (MAPA)	C. Libiran	M. Frierson
M. Nystrom (AUC)	D. Hollingsworth (MCA)	G. J. Bukoski	C. W. Whiteside
M. Newman (MAA)	J. Steele (FHWA)	K. Rothwell	M. P. Krause
T. L. Nelson, Jr.			

DATE: December 3, 1998

TO: Engineering Operations Committee

FROM: Bituminous Advisory Committee

SUBJECT: SUPERPAVE PG Binders and the Use of Polymer Modifiers

The current policy regarding polymer Modified Binders is encompassed in the SUPERPAVE program. The SUPERPAVE performance graded binder specification enables the selection of binders that will perform under specific conditions based on the projects climatic conditions, traffic volumes and speed limit. The specification applies to both unmodified and modified binders. The binder selection may necessitate that the asphalt supplier use a modifier to meet the specified properties, but we do not mandate this.

The SUPERPAVE specification allows the binder suppliers to select modifiers that best fit their operation. Pavement Sealant Products' latex modifier is among those that can compete for inclusion in the binder to meet the final grade requirements.

The Bituminous Advisory Committee (BAC) discussed the EOC presentation by Pavement Sealant Products and it is recommended that the department continue to use the SUPERPAVE program.

The following is a history of specifications regarding the use of Modified binders and a brief description of the reason for the changes:

Special Provision for Rubberized Bituminous Mixture: (? - 1992) This special provision called for adding liquid latex to the bituminous mixture at a specific rate. This Special Provision was to be used on high traffic/high commercial traffic freeway projects.

Special Provision for Polymer Modified Asphalt Cements: (1992 - 1995) This special provision was an attempt at creating a property oriented non-polymer specific specification for asphalt cement. A sample of the unmodified asphalt cement was compared to a sample that contained polymer to determine if the specified property improvements had occurred.

This special provision did not specifically call for latex, nor did it specify the amount of polymer required. The philosophy was that the contractor could select whatever polymer type and amount necessary to meet the specification requirements. This change occurred due to an increase in the number of modifier types that were being marketed.

Special Provision for SHRP Performance Graded Asphalt Binder PG 64-28: (1996-1997) This special provision was used to implement the SUPERPAVE Binder System. This binder grading system was developed by the federal government as part of the Strategic Highway Research Program. It is a performance-based specification that is not specific to the actual ingredients used to meet the performance criteria. This system does not restrict the material supplier's use of modifiers to meet the specification requirements.

1996 MDOT Standard Specifications for Construction: (1998- present) In 1998, the majority of projects were governed by the 1996 Standard Specifications for Construction, which calls for performance graded binders, for all types of mixtures. Only PG graded binder were certified for use on state projects. The plan for 1999 is to specify predominately SUPERPAVE mixtures.

MF:dmg